

WHAT IS CLAIMED IS:

1. Low noise light receiver, comprising
a light sensor for generating a sensor signal, the
sensor signal comprising a wanted signal resulting from a
light source and an interfering signal resulting from
interfering light;

an optical filter for reducing the interfering
light;

an electric filter connected to the light sensor for
filtering out the interfering signal and for generating a
correction signal that substantially compensates the
interfering signal; and

a processor connected to the light sensor and the
electric filter for processing the wanted signal in order
to generate an output signal.

2. Light receiver according to claim 1, wherein the
optical filter comprises an optical band pass filter.

3. Light receiver according to claim 2, wherein the
optical band pass filter is a dielectric filter.

4. Light receiver according to claim 1, wherein the
optical filter comprises at least one optical cutoff
filter.

5. Light receiver according to claim 4, wherein the
slope of the optical cutoff filter is at the short-wave
end of the transmission range of the optical band pass

filter.

6. Light receiver according to claim 4, wherein the optical cutoff filter is a color filter.

7. Light receiver according to claim 1, wherein the light sensor is a wavelength-selective photodiode.

8. Light receiver according to claim 1, wherein the electric filter comprises a current sink and a low pass filter.

9. Light receiver according to claim 8, wherein the current sink is adjustable for essentially compensating the interfering signal.

10. Light receiver according to claim 1, wherein the processor comprises an amplifier and a feedback resistor with a high resistance.

11. Light receiver according to claim 1, wherein the electric filter is connected in parallel to the processor.

12. Photoelectric proximity switch including a light receiver according to claim 1.